of a single amino acid, which analog potentiates cell death; or

(c) a fragment of the sequence of SEQ ID NO:1, which fragment potentiates cell death.

40 (Amended). A polypeptide which potentiates cell death, said polypeptide consisting of an amino acid sequence encoded by a DNA sequence in accordance with claim 44, or a derivative thereof.

41 (Amended). A polypeptide in accordance with claim 40, consisting of a sequence comprising SEQ ID NO:1.

2 (Amended). A polypeptide in accordance with claim 40, consisting of a sequence comprising an analog of SEQ ID NO:1, having no more than ten changes in the amino acid sequence of SEQ ID NO:1, each said change being a substitution, deletion or insertion of a single amino acid, which analog potentiates cell death.

polypeptide which potentiates cell death, which comprises growing a transformed host cell according to claim 8 under conditions suitable for the expression of an expression product, effecting post-translational modification of said expression product, as necessary, for obtaining said polypeptide, and isolating said expressed polypeptide.

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22 (Twice-amended). A composition comprising a pharmaceutically acceptable excipient and at least one polypeptide according to claim 40.

23 (Twice-amended). A composition comprising a pharmaceutically acceptable excipient and a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding said polypeptide according to claim 40.

24 (Twice-amended). A composition comprising a pharmaceutically acceptable excipient and an oligonucleotide sequence encoding an antisense sequence of at least part of an mRNA sequence encoding a polypeptide according to claim 40.

apoptotic processes or programmed cell death processes (cell death pathways) in which the B1 protein of SEQ ID NO:1 is involved, comprising treating said cells with one or more polypeptide according to claim 40, wherein said treating of said cells comprises introducing into said cells said one or more polypeptide in a form suitable for intracellular introduction thereof, or introducing into said cells a DNA sequence encoding said one or more polypeptide in the form of a suitable vector carrying said sequence, said vector being capable of effecting the ingestion of said sequence into said cells in a way that said sequence is expressed in said cells.

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survival processes in which the Bl protein of SEQ ID NO:1 is involved and which include the modulation of cell survival, comprising treating said cells with one or more polypeptide according to claim 40, wherein said treating of cells comprises introducing into said cells said one or more polypeptide in a form suitable for intracellular introduction thereof, or introducing into said cells a DNA sequence encoding said one or more polypeptide in the form of a suitable vector carrying said sequence, said vector being capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells.

36 (Twice-amended). A method for identifying and producing a molecule capable of modulating the cellular activity modulated or mediated by the B1 protein of SEQ ID NO:1, comprising:

- a) screening for a molecule capable of modulating activities modulated or mediated by said B1 protein;
 - b) identifying and characterizing said molecule; and
- c) producing said molecule in substantially isolated and purified form.
- 37 (Twice-amended) A method for identifying and producing a molecule capable of modulating the cellular

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activity modulated or mediated by a polypeptide according to claim 40, comprising:

a) screening for a molecule capable of modulating activities modulated or mediated by said polypeptide;

- b) identifying and characterizing said molecule; and
- c) producing said molecule in substantially isolated and purified form.

Thease add new claim 51 as follows:

51 (New). An oligonucleotide sequence encoding an antisense sequence of at least a part of an mRNA sequence encoding a polypeptide according to claim 40.

REMARKS

Claims 5-8, 11, 12, 14-17, 19, 22-24, 29-37 and 40-51 presently appear in this case. Claims 12, 14-17, 19, 22, 29-37, 40-43, 49 and 50 have been withdrawn from consideration. No claims have been allowed. The official action of August 28, 2001, has now been carefully studied. Reconsideration and allowance are hereby respectfully urged.

Briefly, the present invention relates to DNA encoding a polypeptide which potentiates cell death and has the sequence of SEQ ID NO:1, as well as analogs, fragments and derivatives thereof. The invention also relates to the